1238. A National Comparison of Antibiograms Between Veterans Affairs Long-Term Care Facilities and Affiliated Hospitals

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Background. Ne(NE) Infection Control Assessment and Promotion Program (ICAP) is a quality improvement initiative supported by the NE Department of Health and Human Services. This initiative utilizes subjective survey instruments and surveys involving infectious diseases physicians and certified infection preventionists (IP) to assess and improve infection prevention and control programs (IPCP) in various healthcare settings. NE ICAP conducted on-site surveys and observations of IPCP in many voluntary facilities to include long-term care facilities (LTCFs) between November 2015 and May 2017. SMEs provided on-site coaching and made best practice recommendations (BPR) for priority implementation. Impact of this intervention on LTCF IPCP was examined.

Methods. Using a standardized questionnaire, follow-up phone calls were made with LTCF to evaluate implementation of the BPR one-year post-assessment. Descriptive analyses were performed to examine BPR implementation in LTCF that had follow-up between 4/4/17 to 4/17/18 and to identify factors that promoted or impeded BPR implementation.

Results. Overall, 45 LTCF were assessed. The top 5 IC categories requiring improvement were audit and feedback practices (28 of 45, 62%), PPE supplies at point of use (62%), IC risk assessments (58%), TB risk assessments (56%), and supply and linen storage practices (56%). Follow-up assessments were completed for 270 recommendations in 25 LTCF. Recommendations reviewed ranged from three to 26 per LTCF. The majority of the 270 recommendations had been either completely (35%) or partially (25%) implemented by the time of the follow-up calls. The ICAP visit itself was reported as the most helpful resource for BPR implementation (77 of 162). Lack of staffing was the most commonly mentioned barrier to implementation when LTCF implemented BPR or implemented BPR that was not planned (37 of 85). BPR Implementation most frequently involved additional staff training (64 of 162), review of policies and procedures (38 of 162), and implementing audit (34 of 162) and/or feedback (23 of 162) programs.

Conclusion. Numerous IC gaps exist in LTCF. Peer-to-peer feedback and coaching by SMEs facilitated implementation of many BPR directed toward mitigating identified IC gaps.

Disclosures. All authors: No reported disclosures.

1237. New York State Outpatient Regional Antiobiotic for Urinary Pathogens: Have We Reached a Post Antibiotic Era for the Treatment of UTIs?

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Background. Outpatient prescribing for acute uncomplicated cystitis is a significant driver of antimicrobial use. Empiric therapy should be based on local susceptibility data. However, there is limited guidance on regional susceptibility trends in outpatient settings. This study describes the epidemiology and prevalence of antimicrobial resistance in uropathogens in New York State outpatient settings to help inform empiric treatment decisions.

Methods. Retrospective analysis of positive urine cultures sent to Quest Diagnostics in 2016 from outpatient settings. Cultures that grew ≥10⁵ CFU/mL were included from 17 NYS counties. Bacterial identification and antimicrobial sensitivities were determined on the Vitek-2 using CLSI M-100 S-25 breakpoints. Data were summarized as proportions and stratified by age (<17, 18–64, ≥65) and sex.

Results. Over 78,000 isolates were included (Table 1). The most prevalent isolates were Escherichia coli (65.2%), Enterococcus spp. (11.9%), and Klebsiella pneumoniae (9.9%). E. coli was highly susceptible to nitrofurantoin (NTF; 97.2%) and cefazolin (CFZ; 89.9%) and less susceptible to trimethoprim-sulfamethoxazole (TMP-SMX; 72.9%) and ciprofloxacin (CIP; 78.0%). Enterococcus spp. was highly susceptible to TMP-SMX (90.0%) and CIP (95.2%) and markedly less susceptible to NTF (42.0%). E. coli was more prevalent in females (69.7% vs. 39.6%, P < 0.001). Enterococcus was more prevalent in adults (63.8% vs. 10.1%, P < 0.001). E. coli was similar in men and women (9.6% vs. 10.1%, P = 0.88). Resistance was more prevalent in males (NTF: 6.3% vs. 4.2%; TMP-SMX: 26.3% vs. 22.7%; CIP: 35% vs. 17.3%) and for adults 265 (NTF: 6.2% vs. 3.6%; TMP-SMX: 25.1% vs. 22.1%; CIP: 30.0% vs. 14.0%) P < 0.001 for all comparisons.

Conclusion. NTF appears to be the best empiric choice for outpatient treatment of acute uncomplicated cystitis in New York State. TMP-SMX and ciprofloxacin should be avoided empirically. These data also highlight the necessity to obtain uropathogen sensitivity data to confirm empiric therapy or make appropriate adjustments in the outpatient setting.

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1238. A National Comparison of Antibiotics Between Veterans Affairs Long-Term Care Facilities and Affiliated Hospitals

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Background. Long-term care facilities (LTCFs) face several barriers to creating antibiograms. Here, we evaluate if LTCFs can use antibiograms from affiliated hospitals as their own antibiogram.

Methods. Facility-specific antibiograms were created for all Veterans Affairs (VA) LTCFs and VA Medical Centers (VAMCs) for 2017. LTCFs and affiliated VAMCs were paired and classified as being on the same campus or geographically distinct campuses based on self-report. For each pair, Escherichia coli susceptibility rates (%S) to cefazolin, ceftriaxone, onece, cefepime, ciprofloxacin, nitrofurantoin, sulfamethoxazole/trimethoprim, ampicillin/subactam, piperacillin/tazobactam, and imipenem were compared. As guidelines discourage empiric use of antibiotics if susceptibility rates are >80%, we assessed clinical discordance between each LTCF and affiliated VAMC antibiogram at a threshold of 80% susceptibility. The proportions of concordant susceptibilities between LTCFs and VAMCs on the same campus vs. geographically distinct campuses were compared using Chi-square tests.

Results. A total of 119 LTCFs and their affiliated VAMCs were included in this analysis. 84% (n = 84) of facilities located on the same campus and 29.4% (n = 35) on geographically distinct campuses. The table below shows the overall clinical concordance (agreement) of LTCFs with their affiliated VAMC in regards to E. coli %S to the compared antibiotics. No significant differences were found when comparing LTCFs on the same campus vs. geographically distinct campuses.

<table>
<thead>
<tr>
<th>Antibiotics</th>
<th>Same Campus</th>
<th>Geographically Distinct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ampicillin/sulbactam</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Imipenem</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Nitrofurantoin</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>Cefepime</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Ciprofloxacin</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>Piperacillin/tazobactam</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Sulfamethoxazole/trimethoprim</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Ceftriaxone</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Conclusion. Antibiotics between LTCFs and affiliated VAMCs had a high concordance, except for sulfamethoxazole/trimethoprim, cefazolin and ceftriaxone in regards to susceptibility rates of E. coli. Facilities on the same campus were found to have similar discordance rates to geographically distinct facilities. Future studies are needed to determine how the various approaches to creating LTCF-specific antibiograms are associated with clinical outcomes.

Background. Little is known about infection control (IC) practice gaps in outpatient hemodialysis centers (OHDC). Hence, we examined the frequency of IC gaps and the factors associated with them.

Methods. The Nebraska (NE) Infection Control Assessment and Promotion Program (ICAP) in collaboration with NE Department of Health and Human Services conducted on-site visits to assess infection prevention and control programs (IPC) in 15 OHDC between June 2016 and March 2018. The CDC Infection Prevention and Control Assessment Tool for Hemodialysis Facilities was used for IPCP evaluation. A total of 124 questions, 76 of which represented best practice recommendations (BPR) were analyzed in 10 IC domains. Gap frequencies were calculated for each BPR. Fisher’s exact test was used to study the association of the identified gaps with typical patient census of the facilities and chain affiliation (CA).

Results. Of the 15 OHDC, seven were large centers (typically following >50 patients) and 11 were part of national chains. Important IC gaps exist in all OHDC. A median of 64 (range 57–70) of 76 BPR were being followed by OHDC or were nonapplicable to them. The IC Program and Infrastructure domain had the highest frequency of IC gaps (Figure 1). Figure 2 describes the top 5 IC gaps. Smaller OHDC (sODHC) had work exclusion policies that encourage reporting of illness without any penalty when compared with larger OHDC (75% vs. 0, P = 0.08). Similarly, a higher proportion of sODHC had computer charting terminals when compared with larger OHDC (75% vs. 0, P = 0.01). None of the nonchain OHDC had shared computer charting terminals when compared with 64% of OHDC with CA (P = 0.08) and a majority of nonchain OHDC provided space and encouraged persons to maintain distance with others when having respiratory symptoms as opposed to a minority of OHDC with CA (75% vs. 18%, 0.08).

Conclusion. Important IC gaps exist in OHDC and require mitigation. Informing OHDC of existing IC gaps may help in BPR implementation. Larger scale studies should focus on identifying factors promoting certain BPR implementation in smaller and nonchain OHDC.

Disclosures. All authors: No reported disclosures.